In the Claims:

 (Currently amended) A method of sealing two substrates in a microstructure, characterized in that it comprises comprising the following steps:

there is deposited depositing a first rim onto the <u>a</u> surface of a first substrate (20) a, <u>said</u> first rim (22) comprising an "upper" upper rim (22B) consisting of <u>comprising</u> a layer of sealing material adapted to interdiffuse that interdiffuses spontaneously with the <u>a</u> material of the <u>a</u> second substrate (30) and a "lower" lower rim (22A) consisting of <u>comprising</u> an adhesion material adapted to cause that adheres said first substrate (20) to adhere to said sealing material; and there is deposited

depositing a second rim onto the <u>a</u> surface of at least one protuberance (36) formed on said second substrate (30) facing the <u>said</u> first rim (22), a <u>said</u> second rim (32) consisting of <u>comprising</u> a layer of said sealing material;

--the two portions to be assembled are brought bringing said upper rim and said second rim into contact,; and

- the <u>heating said</u> sealing <u>material</u> region is heated to obtain the interdiffusion of the <u>interdiffuse</u> <u>said</u> sealing material and the <u>said</u> material of the <u>said</u> second substrate (30).

- 2. (Currently amended) The Sealing method according to claim 1, eharacterized in that wherein said sealing material and the <u>a</u> material of said first substrate (20) are able to comprise materials that diffuse into each other and in that wherein said lower rim (22A) forms a barrier to this diffusion.
- 3. (Currently amended) The Sealing method according to claim 1, characterized in that wherein said sealing material and the a material of said first substrate (20) are able to diffuse comprise materials that diffuse into each other and in that wherein said first rim (22) further comprises a layer forming a barrier to this diffusion between said lower rim (22A) and said upper rim (22B).
- 4. (Currently amended) <u>The Sealing sealing</u> method according to any preceding claim <u>1</u>, characterized in that the <u>wherein said</u> first substrate (20) is of <u>comprises</u> silicon.
- 5. (Currently amended) <u>The Sealing sealing</u> method according to any preceding claim <u>1</u>, characterized in that the <u>wherein said</u> second substrate (30) is of <u>comprises</u> silicon.

- 6. (Currently amended) <u>The Sealing sealing method according to any preceding claim 1, characterized in that wherein said sealing material is comprises gold.</u>
- 7. (Currently amended) <u>The Sealing sealing</u> method according to claim 2 or claim 3, characterized in that wherein said barrier layer is of comprises tungsten.
- 8. (Currently amended) A Sealing sealing region between two substrates of a microstructure, characterized in that wherein said sealing region is obtained made by means of a the method according to any preceding claim 1.
- 9. (Currently amended) A Sealing sealing region between two substrates of a microstructure, characterized in that it comprises at least the following portions comprising:
- -on a first substrate (20), a "lower" lower rim (22A) on a first substrate consisting of, the lower rim comprising an adhesion material adapted to cause that adheres said first substrate (20) to adhere to a sealing material adapted to interdiffuse that interdiffuses spontaneously with the a material of the a second substrate (30);
- -on-said lower rim (22A), a layer of said sealing material on said lower rim, and
- -on said sealing material layer, a protuberance (36) formed on said second substrate (30), said protuberance and containing a certain quantity of sealing material and contacting said layer of sealing material.
- 10. (Currently amended) <u>The Sealing sealing</u> region according to claim 9, characterized in that <u>wherein</u> said sealing material and the <u>a</u> material of said first substrate (20) are able to diffuse into each other and in that <u>wherein</u> said lower rim (22A) forms a barrier to this diffusion.
- 11. (Currently amended) <u>The Sealing sealing</u> region according to claim 9, characterized in that <u>wherein</u> said sealing material and the <u>a</u> material of said first substrate (20) are able to diffuse into each other and in that <u>wherein</u> said sealing region further comprises a layer forming a barrier to this diffusion between said lower rim (22A) and said layer of sealing material.

- 12. (Currently amended) <u>The Sealing sealing</u> region according to any-of claims claim 8 to 11, characterized in that wherein said surface of the said protuberance (36) is not plane, but features a certain comprising a number plurality of hollows (39).
- 13. (Currently amended) <u>The Sealing sealing</u> region according to <u>any of elaims claim</u> 8 to 12, <u>characterized in that the wherein said</u> surface of said protuberance (36) has comprises a meshed structure.
- 14. (Currently amended) <u>The Sealing sealing</u> region according to any of claims claim 8 to 13, characterized in that the wherein said first substrate (20) is of comprises silicon.
- 15. (Currently amended) <u>The Sealing sealing region according to any of claims claim</u> 8 to 14, characterized in that the <u>wherein said</u> second substrate (30) is of comprises silicon.
- 16. (Currently amended) <u>The Sealing sealing</u> region according to any of claims claim 8 to 15, characterized in that wherein said sealing material is comprises gold.
- 17. (Currently amended) <u>The Sealing sealing region according to any of claims claim</u> 10 or claim 11, characterized in that wherein said barrier layer is of comprises tungsten.
- 18. (Currently amended) A microstructure Microstructure comprising a sealing region according to any of claims claim 8 to 17.
- 19. (New) The sealing method according to claim 3, wherein said barrier comprises tungsten.
- 20. (New) The sealing region according to claim 9, wherein said surface of said protuberance comprises a plurality of hollows.
- 21. (New) The sealing region according to claim 9, wherein said surface of said protuberance comprises a meshed structure.

- 22. (New) The sealing region according to claim 9, wherein said first substrate comprises silicon.
- 23. (New) The sealing region according to claim 9, wherein said second substrate comprises silicon.
- 24. (New) The sealing region according to claim 9, wherein said sealing material comprises gold.
- 25. (New) The sealing region according to claim 11, wherein said barrier comprises tungsten.